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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,248	03/25/2004	Matthew N. Songer	82650	6681

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EXAMINER

DAVIS, DANIEL J

ART UNIT PAPER NUMBER

3731

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary	Application No. 10/809,248	Applicant(s) SONGER, MATTHEW N.	
	Examiner D. Jacob Davis	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/15/04</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5 are rejected under 35 U.S.C. 101. The claims are replete with claimed non-statutory subject matter. For example, claim 1 recites, "inserted in a bone portion" and "fully sunk into the bone portions." Claim 2 recites, "fully sunk into one vertebra" and "arranged between the vertebrae." The claim limitations may not positively relate a device with non-statutory subject matter. Applicant should review claims 1-5 and make appropriate changes. To assist applicants, an example of one way to overcome the rejection is to prefix the phrases with "adapted to be" or "constructed to be."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3 and 5 are rejected under 35 USC 102(e) as being anticipated by U.S. Publication 2001/0041916 to Bonutti. Fig. 20 discloses first and second anchor members, first and second sutures 50g and 52g, and a connector 54g. Paragraph 37 discloses that the sutures may be cables. The connector 54g is a crimp (paragraph 54).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(c) which forms the basis for all obviousness rejections set forth in this Office action:

(c) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-3 and 5 are rejected under 35 USC 103(c) as being unpatentable over U.S. Patent No. 6,248,106 to Ferree. In Fig. 1A, Ferree discloses anchor members 120, and cables 114 and 116. Fig. 9 illustrates a different embodiment, apparently having only one cable, but further having a crimp 904 to connect the cables. The use of a crimp permits greater flexibility for a surgeon, enabling the length and tension of the wire to be adjusted according to the needs of the patient or in the event of a misplaced screw. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the embodiment of Fig. 1A to include crimps between the cables permitting the lengths and tensions of the cables to be adjustable.

Although Ferree does not disclose that the screws are "fully sunk into the bone," they are inherently capable of being inserted into the bone such that they are "fully sunk into the bone."

Ferree discloses a decompression device (column 1, lines 12-15).

In Figs. 2 and 3, Ferree discloses screw anchors, a driver 304 driving an internal surface, and threading the anchors (column 3, lines 66—et seq.). Respecting claim 6, the traditional locations of proximal and distal are reversed in interpreting the Ferree reference. In other words, the “proximate end” is the shank. Examiner heretofore provided motivation for including a crimp to connect portions of the cables.

Claims 1 and 3-6 are rejected under 35 USC 103(c) as being unpatentable over U.S. Patent No. 5,156,616 to Meadows et al. in view of U.S. Publication 2001/0041916 to Bonutti. Meadows discloses a headless bone anchor and suture for attaching soft tissue to bone.

The Meadows suture is considered a “cable.” If the suture is not considered a cable, Bonutti teaches the use of a cable in place of a suture, well known for its strength in the suturing art. Furthermore, Meadows fails to disclose multiple cables, multiple anchors, and a crimp. Bonutti teaches a system that is also used for attaching soft tissue to bone. As illustrated in Fig. 9, the system comprises two anchors, two cables, and a crimp. Using two anchors apparently attaches the tissue more securely to the bone and decreases the chance of anchor withdrawal. The crimp provides an easy way to secure the cables. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Meadows device as taught by Bonutti, such that two or more anchors and two or more sutures used to more securely attach soft tissue and prevent anchor withdrawal. Furthermore, it would have been obvious to one of

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one of ordinary skill in the art at the time the invention was made to use a crimp to quickly and easily attach the cables.

Regarding claim 6, Meadows discloses a driver 51 in Fig. 5. Regarding the preamble, although Bonutti does not disclose that the system secures separated bone portions, the system as disclosed in Fig. 9, inherently stabilizes the bone.

Claims 1 and 3-6 are rejected under 35 USC 103(c) as being unpatentable over U.S. Publication No. 2001/0041916 to Bonutti in view of U.S. Patent No. 5,156,616 to Meadows et al. Bonutti teaches a variety of anchors, including a threaded anchor in Fig. 19, but fails to disclose headless bone screws. Nevertheless, Meadows teaches a headless bone screw. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the anchor (and driver) taught by Meadows providing a reduced profile (over the headed screw).

Allowable Subject Matter


Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Jacob Davis whose telephone number is (571) 272-4693. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DJD


GLENN K. DAWSON
PRIMARY EXAMINER